



4.2.15 Yuma County

Geography

Yuma County is located in the extreme southwestern corner of the State and much of its 5,522 square miles in desert land accented by rugged mountains. The County is characterized by two prominent river valley regions formed by the Gila and Colorado Rivers. Within these regions exist an abundance of arable land which is irrigated with water from the Colorado River and groundwater supplies. The Colorado and Gila River Valley areas have some of the most fertile soils in the world, having received silt and mineral deposits from flooding of the watercourses until the rivers were "tamed" by an intricate series of dams and canals. All of the County is situated within the Sonoran Desert and is characterized by an arid environment with elevations that vary. The vegetation is comprised mainly of a mixture of palo verde, cacti, creosotebush and bursage communities.

Population

The County represents one of the faster growing populations in Arizona. Between 2000 and 2005, the population grew 17.8%. The County's population in 2005 was 188,480. The towns of San Luis, Somerton, and Wellton complement the City of Yuma, which is the predominant population, civic, and economic center of the County. While most of the communities are expected to continue growing at a moderate pace, Yuma is projected to post an especially high population gain in the coming decade. Based on some of the jurisdictions' past and most recent population data, the projected data may appear inaccurate. This discrepancy is due to higher than expected growth and the projection data source. The US Census Bureau's latest published survey is from the year 2000.

Yuma County Population, 1990-2040							
Jurisdiction	1990	2000	2005	2010	2020	2030	2040
Yuma County	106,895	160,026	189,480	218,810	271,361	316,158	351,299
Cocopah Reservation	515	1,025	N/A	N/A	N/A	N/A	N/A
Ft Yuma Reservation	N/A	36	N/A	N/A	N/A	N/A	N/A
San Luis	4,212	15,322	22,930	16,976	20,517	26,595	35,311
Somerton	5,282	7,266	9,750	8,224	9,872	11,814	13,935
Wellton	1,066	1,829	1,970	1,415	1,610	1,841	2,094
Yuma	56,966	77,515	88,775	83,462	99,337	119,951	136,516

Source: Arizona Department of Commerce, April 2007; Arizona Department of Economic Security, February 1997.

Economy & Labor Force

The County's major employment industries/sectors are farming, cattle raising, tourism, the US Marine Corps Air Station Yuma and US Army Yuma Proving Ground. The unemployment rate in 2005 was 16%, which indicates a very high number when compared to the statewide average of 4.6% for the same period. Some of the County's major tourist attractions include the historical Territorial Prison, Yuma Crossing Historic Park, Kofa Mountain Range and Wildlife Refuge, Martinez and Military Lakes and hunting for a variety of game.

Historic Hazard Events

During the development of the original State of Arizona All-Hazard Mitigation Plan, a list of historic hazard events was compiled. Most counties researched local records and governmental databases to update and add records of recent hazards to the state compiled list for use in their plans. Additional hazard records were researched using the same criteria, with the exception that all damages greater than \$1 were included. Therefore, due to the variety of data sources and criteria, it should be kept in mind that the numbers reported reflect the availability of such data from those sources and the numbers are expected to under-predict the losses actually sustained over the past 30 to 40 years. A more thorough search for historic data in future planning efforts is mentioned in the county plans and encouraged by ADEM.

It is our hope that this data coupled with other risk assessment information will prove to be instrumental in assisting the County and State in future planning and mitigation efforts. We believe this can happen by this data accurately indicating which hazards we are most susceptible to; how damaging these hazards can be to us; and the damage costs or costs avoided through future mitigation projects.



Historic Record of Disaster Events in Yuma County								
Event Type	Statewide or Multiple County, Incl Yuma				Substantially Yuma			
	Total	Fatalities	Injuries	Loss \$	Total	Fatalities	Injuries	Loss \$
Drought	66	0	0	300,211,000	0	0	0	0
Earthquake	0	0	0	0	44	8	0	25,000
Flooding/Flash Flooding	7	11	0	694,565,000	9	0	0	165,125,000
Hazardous Mat'ls Incidents	0	0	0	0	8	2	52	50,000
Thunderstorms/High Winds	1	0	0	561,000	10	0	13	5,155,000
Tornadoes/Dust Devils	0	0	0	0	5	0	1	284,000
Tropical	8	23	0	383,118,000	2	0	0	204,318,000
Wildfire	11	0	0	2,315,000	7	0	0	0
Note: "Statewide or Multiple County, Incl Yuma" events met the 1 or more of the following criteria: at least 1 injury and/or fatality or Historical Significance. All had at least \$50,000 in reported Losses. "Substantially Yuma" events met 1 or more of the following criteria: at least 1 reported injury and/or fatality or Historical Significance. No minimum dollar amount for Losses was used. All information is derived from the best data available at the time.								
Source: Yuma County Multi-Hazard Mitigation Plan, FEMA Approved October 2005.								

Vulnerability

The County has a small number, but high ratio of population that is potentially vulnerable to hazards. With a total population of 188,480, the County contains a modest proportion of the State's overall population base (3.1%). There is a population that is proportionately both young and aged, with 29.2% of its residents being less than 18 years of age and 17.4% over the age of 65.

Yuma County Populations Potentially Vulnerable to Hazards, 2005				
Jurisdiction	Population			
	Total	Under 18 yrs	65+ years	Below Poverty Level
Arizona	6,044,985	1,607,966	773,758	840,253
Yuma County	189,480	55,036	32,796	33,926
As a % of County	100%	29.2%	17.4%	18%
As a % of State	3.1	3.4%	4.2%	4%
Source: Estimates based on US Census Bureau data, 2007. Poverty Level as defined by US Census Bureau.				

Yuma County Dwelling Units Potentially Vulnerable to Hazards, 2005		
Jurisdiction	Housing Units	
	Total	Built Before 1970
Arizona	2,544,806	490,710
Yuma County	83,186	16,399
Source: Estimates based on US Census Bureau. Data, 2007.		

Hazards & Mitigation Strategy

Using the results of the County's vulnerability and capability analysis and the goals and objectives, a list of actions/projects was formulated. The actions/projects were then evaluated and ranked using the STAPLEE procedure. Below are the top ranking identified hazards and their actions/projects as indicated in the County's Hazard Mitigation Plan approved by FEMA on October 12, 2005:

Drought

Action 1: Public education campaign to encourage citizens to conserve water.

Action 2: Continue to enforce building code low water use fixture requirements for new residential and commercial buildings.

Earthquake

Action: Develop an approach to reducing the level of damage due to earthquakes.

Action 2: Adopt and support local codes.

Flooding/Flash Flooding

Action 1: Flood control topographic mapping



Action 2: Gila River obstruction removal and channel restoration.

Mitigation Strategy Progress

Through development of this Plan, the need to significantly refine the goals/objectives and actions/projects in our original Plan was evident. We believe this need is a result of the determination to focus the Plan more on natural caused hazards as other hazards are covered in their appropriate plans (i.e. health, terrorism, etc.). There is also much to be said about the increased amount of information available regarding hazard mitigation planning.

To encourage our jurisdictions to re-evaluate their Plan's Mitigation Strategy as well, each County was asked to indicate their action/project progress since the development of their Plan. In response to our request, the County provided the information below in June 2007:

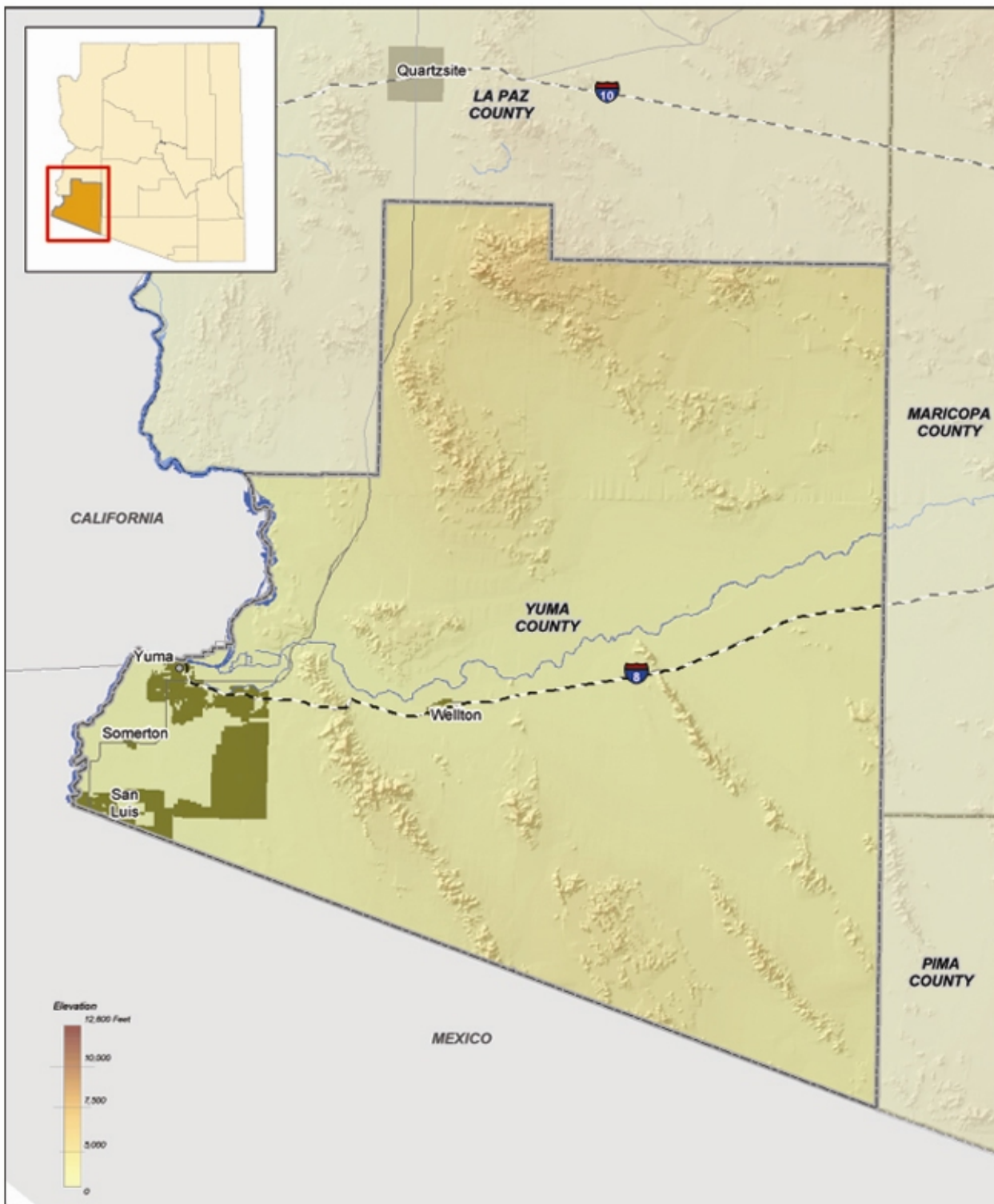
Goal	Hazard Mitigated	Progress Summary
Promote disaster resistant future development.	All	Both objectives listed have been met.
Promote public understanding, support & involvement for hazard mitigation.	All	All 4 listed objectives are currently in-progress.
Build & support local capacity & commitment to become less vulnerable to hazards.	All	All 3 listed objectives are currently in-progress.
Improve hazard mitigation coordination & comm w/federal, state, local & tribal governments.	All	The listed objective is currently in-progress.
Reduce the level of human loss & damage & losses to existing & future critical facilities/infrastructure & other community assets due to floods.	Flood	All 4 listed objectives have been met.
Reduce the level of human loss & damage & losses to existing & future critical facilities/infrastructure & other community assets due to hazardous materials incidents.	Hazard Materials Incidents	2 of the objectives listed are currently in-progress and 1 is pending.
Reduce the level of human loss & damage & losses to existing & future critical facilities/infrastructure & other community assets due to intentional human acts (civil disobedience/disturbance, terrorism).	Human Caused (Intentional)	2 of the listed objectives have been met and 2 are currently in-progress.
Reduce the level of human loss & damage & losses to existing & future critical facilities/infrastructure & other community assets due to other natural hazards.	Other Natural	1 of the listed objectives is in progress and 2 are pending.
Reduce the level of human loss & damage & losses to existing & future critical facilities/infrastructure & other community assets due to other human caused hazards.	Other Human Caused	2 of the listed objective are in progress and 1 is currently pending.

Other Planning Mechanisms

During their planning process, the County staff reviewed and evaluated their resources and capabilities in the areas of Existing Plans, Policies and Ordinances; Technical Staff/Resources and Financial Resources. Although all resources are important to a community's ability to mitigate the effects of natural and human-caused hazards, we elected to ask the County to complete a survey indicating their legal and regulatory resources to be included in the Plan. We are pleased to receive feedback that reflects awareness of the need for regulations and guidelines that may have an effect on loss reduction. We believe such resources and capabilities can play a critical part in developing and maintaining a more disaster resistant community. The information below was provided by the County in June 2007:



	Yes or	Approval	Responsible	
Plan/Policy/Ordinance	No	Date	Authority	Plan Use/Comments
Building Code	Y	2006	Development Svcs	Yuma Co has adopted the City of Yuma building codes.
Zoning Ordinance	Y	2007	Development Svcs	
Subdivision Ordinance or Regulations	Y	2004	Development Svcs	Yuma Co is currently updating.
Site Plan Review	Y	2000	Development Svcs	Reviewed prior to any dev by DDS.
General or Comprehensive Plan	Y	2005	Development Svcs	Comp plan currently in place for 2010 & under review for 2020.
Capital Improvement Plan	Y		Development Svcs	
Economic Development Plan	Y		GYEDC	"Greater Yuma Economic Dev Corp"
Emergency Response Plan	Y	2004	OEM	Plan highlights emerg responsibilities for various Yuma agencies. Update in progress. Anticipated release: Oct 2007.
Source: Survey from ADEM to County Emergency Managers, 2007.				



LEGEND

- - Interstate
- Highway
- City
- County
- County Seat
- Major Stream
- Lake



State of Arizona
Multi-Hazard Mitigation Plan

Map 17 Major Features of Yuma County